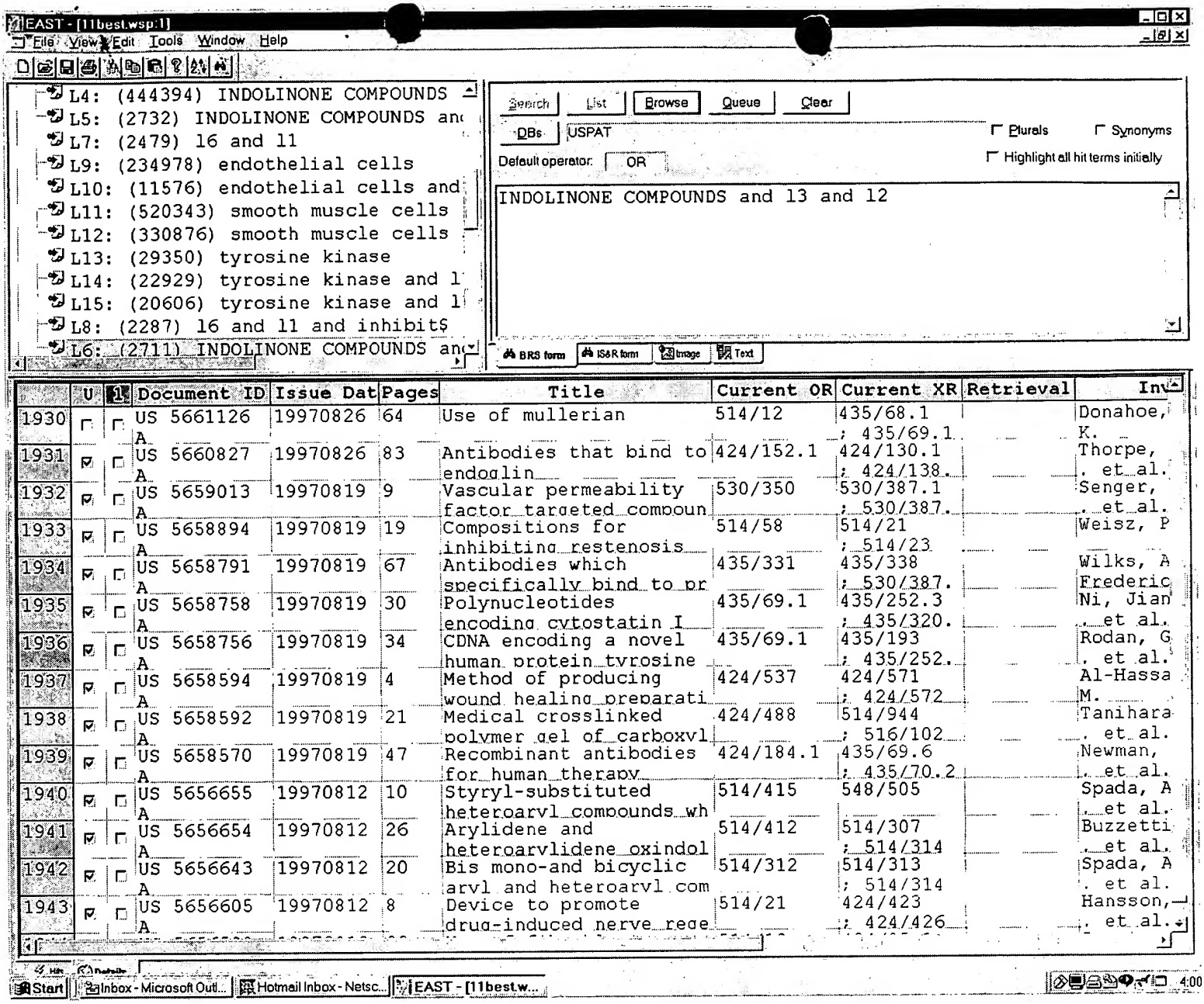


	U		Document ID	Issue Dat	Pages	Title	Current OR	Current XR	Retrieval	In
1930	☐	☐	US 5661126 A	19970826	64	Use of mullerian	514/12	435/68.1 ; 435/69.1		Donahoe, K.
1931	☑	☐	US 5660827 A	19970826	83	Antibodies that bind to endoglin	424/152.1	424/130.1 ; 424/138.		Thorpe, . et al.
1932	☑	☐	US 5659013 A	19970819	9	Vascular permeability factor targeted compoun	530/350	530/387.1 ; 530/387.		Senger, . et al.
1933	☑	☐	US 5658894 A	19970819	19	Compositions for inhibiting restenosis	514/58	514/21 ; 514/23		Weisz, P
1934	☑	☐	US 5658791 A	19970819	67	Antibodies which specifically bind to pr	435/331	435/338 ; 530/387.		Wilks, A Frederic
1935	☑	☐	US 5658758 A	19970819	30	Polynucleotides encoding cytostatin I	435/69.1	435/252.3 ; 435/320.		Ni, Jian . et al.
1936	☑	☐	US 5658756 A	19970819	34	CDNA encoding a novel human protein tyrosine	435/69.1	435/193 ; 435/252.		Rodan, G . et al.
1937	☑	☐	US 5658594 A	19970819	4	Method of producing wound healing preparati	424/537	424/571 ; 424/572		Al-Hassa M.
1938	☑	☐	US 5658592 A	19970819	21	Medical crosslinked polymer gel of carboxyl	424/488	514/944 ; 516/102		Tanihara . et al.
1939	☑	☐	US 5658570 A	19970819	47	Recombinant antibodies for human therapy	424/184.1	435/69.6 ; 435/70.2		Newman, . et al.
1940	☑	☐	US 5656655 A	19970812	10	Styryl-substituted heteroaryl compounds wh	514/415	548/505		Spada, A . et al.
1941	☑	☐	US 5656654 A	19970812	26	Arylidene and heteroarylidene oxindol	514/412	514/307 ; 514/314		Buzzetti . et al.
1942	☑	☐	US 5656643 A	19970812	20	Bis mono-and bicyclic aryl and heteroaryl com	514/312	514/313 ; 514/314		Spada, A . et al.
1943	☑	☐	US 5656605 A	19970812	8	Device to promote drug-induced nerve rege	514/21	424/423 ; 424/426		Hansson, . et al.

EAST - [11best.wsp:1]

File View Edit Tools Window Help

L4: (444394) INDOLINONE COMPOUNDS
L5: (2732) INDOLINONE COMPOUNDS an
L7: (2479) l6 and l1
L9: (234978) endothelial cells
L10: (11576) endothelial cells and
L11: (520343) smooth muscle cells
L12: (330876) smooth muscle cells
L13: (29350) tyrosine kinase
L14: (22929) tyrosine kinase and l
L15: (20606) tyrosine kinase and l
L8: (2287) l6 and l1 and inhibit$
L6: (2711) INDOLINONE COMPOUNDS an

Search | List | Browse | Queue | Clear

DBs: USPAT | Plurals | Synonyms

Default operator: OR | Highlight all hit terms initially

INDOLINONE COMPOUNDS and l3 and l2

BRS form | IS&R form | Image | Text

	U		Document ID	Issue Dat	Pages	Title	Current OR	Current XR	Retrieval	Inv
1970		☑	US 5650415 A	19970722	23	Quinoline compounds	514/312	514/313 ; 546/153		Tang, Pe . et al.
1971	☑		US 5650313 A	19970722	32	Ubiquitin conjugating enzymes 8 and 9	435/193	435/252.3 ; 435/320.		Ni, Jian . et al.
1972	☑		US 5650293 A	19970722	35	Nucleic acid encoding pp60.sup.PIK and the me	435/69.1	435/252.3 ; 435/320.		White, M
1973	☑		US 5650267 A	19970722	27	Method of detecting compounds utilizing gen	435/5	435/235.1 ; 435/320.		Ray, Bry . et al.
1974	☑		US 5650148 A	19970722	114	Method of grafting genetically modified ce	424/93.2	424/93.21 ; 435/948		Gage, Fr . et al.
1975	☑		US 5650135 A	19970722	33	Non-invasive localization of a light	424/9.1	424/193.1 ; 424/258.		Contag, Christor
1976	☑		US 5648357 A	19970715	40	Enatiomerically pure hydroxylated xanthine c	514/263	514/267 ; 514/270		Bianco, . et al.
1977	☑		US 5648334 A	19970715	42	Methods of treatment using ciliary neurotrop	514/12	514/2 ; 530/350		Davis, S . et al.
1978	☑		US 5648217 A	19970715	19	DNA sequence which binds transcriptional r	435/6	435/69.8 ; 435/7.1		Levy, Da
1979	☑		US 5646261 A	19970708	30	3'-derivatized oligonucleotide analogs	536/24.3	536/24.5		Uhlmann, . et al.
1980	☑		US 5646251 A	19970708	39	Alloreaction-associated antigen (ARAG): a novel	530/350	435/69.1 ; 530/324		Ruegg, C . et al.
1981	☑		US 5646153 A	19970708	56	Bis mono- and bicyclic aryl and heteroaryl com	514/259	514/248 ; 514/249		Spada, A . et al.
1982	☑		US 5646117 A	19970708	9	Therapeutic agent for treating wounds using m	514/12	424/85.1 ; 424/85.2		Matsushi . et al.
1983	☑		US 5646109 A	19970708	25	Convertible microemulsion formulati	514/2	424/400 ; 514/12		Owen, Al . et al.

Start | Inbox - Microsoft Outl... | Hotmail Inbox - Netsc... | EAST - [11best.w... | 3:57

NCBI PubMed National Library of Medicine NLM

PubMed Nucleotide Protein Genome Structure PopSet Taxonomy OMIM

Search PubMed for modulating the activity of VEGF, FGF, OR PDGF Go Clear

Limits Preview/Index History Clipboard

Display Summary Save Text Order Details Add to Clipboard

Entrez PubMed

NEW

PubMed Services

Related Resources

1: Liu ZY, Ganju RK, Wang JF, Schweitzer K, Weksler B, Avraham S, Groopman JE. Related Articles

Characterization of signal transduction pathways in human bone marrow endothelial cells.

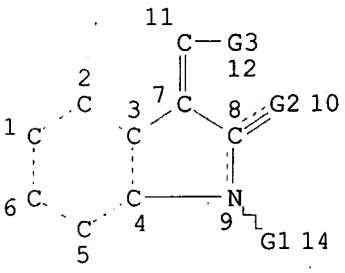
Blood. 1997 Sep 15;90(6):2253-9.

PMID: 9310476 [PubMed - indexed for MEDLINE]

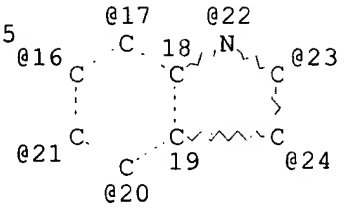
Write to the Help Desk
NCBI | NLM | NIH
Department of Health & Human Services
Freedom of Information Act | Disclaimer

RSPEC I
NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE
L4 (2203)SEA FILE=REGISTRY SSS FUL L3
L5 STR



Ak @13



Hy @25

VAR G1=H/13
VAR G2=O/S
VAR G3=22/23/24/20/21/16/17/25/15
NODE ATTRIBUTES:
CONNECT IS E1 RC AT 13
DEFAULT MLEVEL IS ATOM
GGCAT IS MCY UNS AT 25
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS E4 C E1 N AT 15
ECOUNT IS E4 C E1 S AT 25

Claim 2
A limited to thiophene, pyrrole, 4,5,6,7 tetrahydroindole

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 25

STEREO ATTRIBUTES: NONE
L6 1062 SEA FILE=REGISTRY SUB=L4 SSS FUL L5

100.0% PROCESSED 2203 ITERATIONS 1062 ANSWERS
SEARCH TIME: 00.00.03

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 10:01:06 ON 24 MAY 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1947 - 24 May 2001 VOL 134 ISS 22
FILE LAST UPDATED: 23 May 2001 (20010523/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

HCAplus now provides online access to patents and literature covered in CA from 1947 to the present. On April 22, 2001, bibliographic information and abstracts were added for over 2.2 million references published in CA from 1947 to 1966.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> d his l7-

(FILE 'REGISTRY' ENTERED AT 09:46:53 ON 24 MAY 2001)

FILE 'HCAPLUS' ENTERED AT 09:47:15 ON 24 MAY 2001
L7 84 S L6
L8 21787 S VEGF OR PDGF OR FGF OR (VASCULAR ENDOTHELIAL OR PLATELET DERI
L9 64218 S PROLIFER? OR ANTIPROLIF?

FILE 'STNGUIDE' ENTERED AT 09:50:24 ON 24 MAY 2001

FILE 'HCAPLUS' ENTERED AT 09:58:32 ON 24 MAY 2001
L10 37 S L7 AND (L8 OR L9)
L11 8 S L7 AND L8 AND L9 claim 2 w/ keywords
L12 29 S L10 NOT L11
L13 7 S L12 AND (63/SC,SX OR PHARMA?) - claim other pharmaceut.

FILE 'REGISTRY' ENTERED AT 10:00:40 ON 24 MAY 2001 too many structures to

FILE 'HCAPLUS' ENTERED AT 10:01:06 ON 24 MAY 2001 print out

=> d .ca hitstr l11 1-8;d .ca hitstr l13 1-7

L11 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:153502 HCAPLUS
TITLE: Inhibition of the **VEGF** receptor 2 combined with chronic hypoxia causes cell death-dependent pulmonary endothelial cell **proliferation** and severe pulmonary hypertension
AUTHOR(S): Taraseviciene-Stewart, Laimute; Kasahara, Yasunori; Alger, Lori; Hirth, Peter; McMahon, Gerald; Waltenberger, Johannes; Voelkel, Norbert F.; Tuder, Rubin M.
CORPORATE SOURCE: Department of Pathology, Division of Pulmonary Sciences and Critical Care Medicine, University of Colorado Health Sciences Center, Denver, CO, 80262, USA
SOURCE: FASEB J. (2001), 15(2), 427-438
CODEN: FAJOEC; ISSN: 0892-6638 -

PUBLISHER: Federation of American Societies for Experimental Biology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Our understanding of the pathobiol. of severe pulmonary hypertension, usually a fatal disease, has been hampered by the lack of information of its natural history. We have demonstrated that, in human severe pulmonary hypertension, the precapillary pulmonary arteries show occlusion by proliferated endothelial cells. Vascular endothelial growth factor (VEGF) and its receptor 2 (VEGFR-2) are involved in proper maintenance, differentiation, and function of endothelial cells. We demonstrate here that VEGFR-2 blockade with SU5416 in combination with chronic hypobaric hypoxia causes severe pulmonary hypertension assocd. with precapillary arterial occlusion by proliferating endothelial cells. Prior to and concomitant with the development of severe pulmonary hypertension, lungs of chronically hypoxic SU5416-treated rats show significant pulmonary endothelial cell death, as demonstrated by activated caspase 3 immunostaining and TUNEL. The broad caspase inhibitor Z-Asp-CH2-DCB prevents the development of intravascular pulmonary endothelial cell growth and severe pulmonary hypertension caused by the combination of SU5416 and chronic hypoxia.

CC 14-5 (Mammalian Pathological Biochemistry)

ST VEGFR chronic hypoxia pulmonary hypertension artery cell **proliferation**

IT Proteins, specific or class
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(Akt; VEGFR-2 blockade with SU5416 in combination with chronic hypobaric hypoxia causes severe pulmonary hypertension assocd. with precapillary arterial occlusion by **proliferating** endothelial cells)

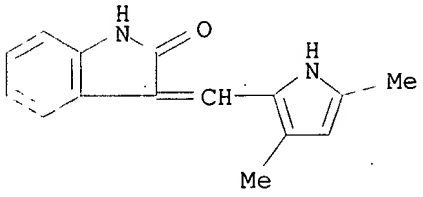
IT Transcription factors
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(Src; VEGFR-2 blockade with SU5416 in combination with chronic hypobaric hypoxia causes severe pulmonary hypertension assocd. with precapillary arterial occlusion by **proliferating** endothelial cells)

IT Apoptosis
Cell death
Cell **proliferation**
Lung
(VEGFR-2 blockade with SU5416 in combination with chronic hypobaric hypoxia causes severe pulmonary hypertension assocd. with precapillary arterial occlusion by **proliferating** endothelial cells)

IT Hypoxia, animal
(chronic; VEGFR-2 blockade with SU5416 in combination with chronic hypobaric hypoxia causes severe pulmonary hypertension assocd. with precapillary arterial occlusion by **proliferating** endothelial cells)

IT **Vascular endothelial growth factor** receptors
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(gene KDR; VEGFR-2 blockade with SU5416 in combination with chronic hypobaric hypoxia causes severe pulmonary hypertension assocd. with precapillary arterial occlusion by **proliferating** endothelial cells)

IT Artery
(pulmonary, endothelium; VEGFR-2 blockade with SU5416 in combination with chronic hypobaric hypoxia causes severe pulmonary hypertension assocd. with precapillary arterial occlusion by **proliferating** endothelial cells)
IT Hypertension
(pulmonary; VEGFR-2 blockade with SU5416 in combination with chronic hypobaric hypoxia causes severe pulmonary hypertension assocd. with precapillary arterial occlusion by **proliferating** endothelial cells)
IT **204005-46-9**, SU5416
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(VEGFR-2 blockade with SU5416 in combination with chronic hypobaric hypoxia causes severe pulmonary hypertension assocd. with precapillary arterial occlusion by **proliferating** endothelial cells)
IT 169592-56-7, caspase 3
RL: BOC (Biological occurrence); BIOL (Biological study); OCCU (Occurrence)
(VEGFR-2 blockade with SU5416 in combination with chronic hypobaric hypoxia causes severe pulmonary hypertension assocd. with precapillary arterial occlusion by **proliferating** endothelial cells)
IT **204005-46-9**, SU5416
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(VEGFR-2 blockade with SU5416 in combination with chronic hypobaric hypoxia causes severe pulmonary hypertension assocd. with precapillary arterial occlusion by **proliferating** endothelial cells)
RN 204005-46-9 HCAPLUS
CN 2H-Indol-2-one, 3-[(3,5-dimethyl-1H-pyrrol-2-yl)methylene]-1,3-dihydro- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 32
REFERENCE(S):
(1) Alon, T; Nature Med 1995, V1, P1024 HCAPLUS
(2) Barst, R; N Engl J Med 1996, V334, P296 HCAPLUS
(4) Daemen, M; J Clin Invest 1999, V104, P541 HCAPLUS
(5) Dimmeler, S; Cell Death Differ 1999, V6, P964 HCAPLUS
(6) Feng, Y; Biochem Biophys Res Commun 1999, V256, P192 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:417312 HCAPLUS
DOCUMENT NUMBER: 133:159618
TITLE: Identification of Substituted 3-[(4,5,6,7-Tetrahydro-1H-indol-2-yl)methylene]-1,3-dihydroindol-2-ones as

Growth Factor Receptor Inhibitors for **VEGF**-R2 (Flk-1/KDR), **FGF**-R1, and **PDGF**-R.beta. Tyrosine Kinases

AUTHOR(S): Sun, Li; Tran, Ngoc; Liang, Congxing; Hubbard, Steve; Tahg, Flora; Lipson, Kenneth; Schreck, Randall; Zhou, Yong; McMahon, Gerald; Tang, Cho

CORPORATE SOURCE: SUGEN Inc., South San Francisco, CA, 94080-4811, USA

SOURCE: J. Med. Chem. (2000), 43(14), 2655-2663
CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

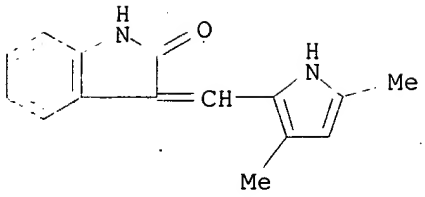
AB A series of new 3-substituted indolin-2-ones contg. a tetrahydroindole moiety was developed as specific inhibitors of receptor tyrosine kinases assocd. with VEGF-R, FGF-R, and PDGF-R growth factor receptors. These compds. were evaluated for their inhibitory properties toward VEGF-R2 (Flk-1/KDR), FGF-R1, PDGF-R.beta., p60c-Src, and EGF-R tyrosine kinases and their ability to inhibit growth factor-dependent cell proliferation. Structure-activity relationships of this new pharmacophore have been detd. at the level of kinase inhibition. Compds. contg. a propionic acid moiety at the C-3' position of the tetrahydroindole ring represented the most potent indolin-2-ones to inactivate the VEGF, FGF, and PDGF receptor kinases. The inhibitory activities of 3-[3-(2-carboxyethyl)-4,5,6,7-tetrahydro-1H-indol-2-ylmethylene]-2-oxo-2,3-dihydro-1H-indole-5-carboxylic acid against VEGF-R2 (Flk-1), 3-{2-[6-(2-methoxyphenyl)-2-oxo-1,2-dihydroindol-3-ylidenemethyl]-4,5,6,7-tetrahydro-1H-indol-3-yl}propionic acid against FGF-R1, and 3-[2-(5-bromo-2-oxo-1,2-dihydroindol-3-ylidenemethyl)-4,5,6,7-tetrahydro-1H-indol-3-yl]propionic acid (I) against PDGF-R.beta. were 4, 80, and 4 nM, resp. However, all of these compds. were inactive when tested against the EGF-R tyrosine kinase. Compds. 3-[2-(2-oxo-1,2-dihydroindol-3-ylidenemethyl)-4,5,6,7-tetrahydro-1H-indol-3-yl]propionic acid (II) and I represented the most potent inhibitors of these classes to inhibit both biochem. kinase and growth factor-dependent cell proliferation for these three targets. In addn., compd. II was cocrystd. with the catalytic domain of FGF-R1 providing evidence to explain the structure-activity relation results. This study has provided evidence to support the potential of these new tyrosine kinase inhibitors for the treatment of angiogenesis and other growth factor-related diseases including human cancers.

CC 1-3 (Pharmacology)
Section cross-reference(s): 2, 7, 27, 75

IT Enzyme functional sites
(active; substituted [(tetrahydroindolyl)methylene]dihydroindolones as growth factor receptor inhibitors for **VEGF**-R2 (Flk-1/KDR) and **FGF**-R1, and **PDGF**-R.beta. tyrosine kinases and as inhibitors of growth factor-dependent cell **proliferation**)

IT **Vascular endothelial growth factor** receptors
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(gene KDR; substituted [(tetrahydroindolyl)methylene]dihydroindolones as growth factor receptor inhibitors for **VEGF**-R2 (Flk-1/KDR) and **FGF**-R1, and **PDGF**-R.beta. tyrosine kinases and as inhibitors of growth factor-dependent cell **proliferation**)

IT Structure-activity relationship



=> d .ca l13 1-7

L13 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:456819 HCAPLUS
DOCUMENT NUMBER: 133:84238
TITLE: 3-heteroarylidenyl-2-indolinone compounds for modulating protein kinase activity and for use in cancer chemotherapy
INVENTOR(S): Langecker, Peter J.; Shawver, Laura Kay; Tang, Peng Cho; Sun, Li
PATENT ASSIGNEE(S): Sugen, Inc., USA
SOURCE: PCT Int. Appl., 148 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000038519	A1	20000706	WO 1999-US31232	19991230

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1998-114313 P 19981231
OTHER SOURCE(S): MARPAT 133:84238
AB 3-Heteroarylidenyl-2-indolinone compds. are provided that modulate the enzymic activity of protein kinases and therefore are expected to be useful in the prevention and treatment of protein kinase-related cellular disorders, e.g. cancer. Furthermore, these compds. are expected to enhance the efficacy of other chemotherapeutic agents, in particular, fluorinated pyrimidines, in the treatment of cancer.
IC ICM A01N043-38
ICS A61K031-40
CC 1-6 (Pharmacology)
Section cross-reference(s): 27, **63**
IT Cell **proliferation**
Kidney, neoplasm

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9640116	A1	19961219	WO 1996-US8903	19960605
W: AL, AM, AU, AZ, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IL, IS, JP, KG, KP, KR, KZ, LK, LR, LS, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, UZ, VN, AM, AZ, BY				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5880141	A	19990309	US 1995-485323	19950607
CA 2192797	AA	19961219	CA 1996-2192797	19960605
AU 9660441	A1	19961230	AU 1996-60441	19960605
AU 706597	B2	19990617		
EP 769947	A1	19970502	EP 1996-918093	19960605
EP 769947	B1	20010502		
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
BR 9606410	A	19971230	BR 1996-6410	19960605
JP 10504323	T2	19980428	JP 1996-501363	19960605
EP 934931	A2	19990811	EP 1999-103667	19960605
EP 934931	A3	19991020		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI				
JP 2000026412	A2	20000125	JP 1999-159567	19960605
NO 9605377	A	19970212	NO 1996-5377	19961213

PRIORITY APPLN. INFO.:	US 1995-485323	A	19950607
	EP 1996-918093	A3	19960605
	JP 1997-501363	A3	19960605
	WO 1996-US8903	W	19960605

OTHER SOURCE(S): MARPAT 126:139901

AB The present invention relates to org. mols. capable of modulating tyrosine kinase signal transduction in order to regulate, modulate and/or inhibit abnormal cell proliferation. Representatives of the 5 different classes of compds. described are SU 4932 [3-(2-chloro-4-hydroxybenzylidenyl)-2-indolinone], SU 4312 [3-(4-dimethylaminobenzylidenyl)-2-indolinone], SU 5416 {3-[(2,4-dimethylpyrrol-5-yl)methylene]-2-indolinone}, SU 5204 [3-(2-ethoxybenzylidenyl)-2-indolinone], and SU 4942 [3-(4-bromobenzylidenyl)-2-indolinone]. Diseases which these compds. and their pharmaceutically acceptable prepns. may be effective against include arthritis, hepatic cirrhosis, diabetic nephropathy and psoriasis.

IC ICM A61K031-40
ICS C07C209-34

CC 1-12 (Pharmacology)
Section cross-reference(s): 27, 63

IT Epidermal growth factor receptors
Fibroblast growth factor receptors
Insulin receptors
Insulin-like growth factor I receptors
Platelet-derived growth factor receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study) (prepn. of indolinones capable of modulating tyrosine kinase signal transduction)

L13 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1997:640690 HCAPLUS
DOCUMENT NUMBER: 127:314804
TITLE: Assays for KDR/FLK-1 receptor tyrosine kinase inhibitors, and use of the inhibitors for treatment of vasculogenesis- and angiogenesis-related diseases
INVENTOR(S): Hirth, Klaus P.; McMahon, Gerald; Shawver, Laura K.
PATENT ASSIGNEE(S): Sugen, Inc., USA
SOURCE: PCT Int. Appl., 65 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9734920	A1	19970925	WO 1997-US3378	19970304
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GH, HU, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9720667	A1	19971010	AU 1997-20667	19970304
PRIORITY APPLN. INFO.:			US 1996-621734	19960321
			WO 1997-US3378	19970304

AB Processes are disclosed for the identification of compds. and pharmaceutical compns. capable of selectively and potently inhibiting KDR/FLK-1 tyrosine kinase signal transduction in order to inhibit vasculogenesis and/or angiogenesis. The invention also relates to compds. and compns. identified using the methods of the invention and the use thereof for the treatment of disease relating to inappropriate vasculogenesis and/or angiogenesis. The invention provides an assay cascade comprised of several "filter steps" of increasing selectivity which identify a limited subset of candidate compds. affecting the VEGF receptor on the mol. level.

IC ICM C07K002-00
ICS C07K014-705; C07K016-28; C12N005-06; C12N005-07; C12Q001-00; A16K031-00; A16K035-00; A16K039-395; G01N033-15; G01N033-48; G01N022-53

CC 1-1 (Pharmacology)
Section cross-reference(s): **63**

IT Animal cell line
(EPH-4/**VEGF**; KDR/FLK-1 receptor tyrosine kinase inhibitor identification assay, and use of compds. for treatment of vasculogenesis- and angiogenesis-related diseases)

IT Antibodies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immobilized, to **VEGF** receptor; KDR/FLK-1 receptor tyrosine kinase inhibitor identification assay, and use of compds. for treatment of vasculogenesis- and angiogenesis-related diseases)

IT Growth factor receptors

RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(**vascular endothelial growth factor**, gene KDR; KDR/FLK-1 receptor tyrosine kinase inhibitor identification assay, and use of compds. for treatment of vasculogenesis- and angiogenesis-related diseases)

IT Growth factor receptors
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(**vascular endothelial growth factor**, gene flt 1; KDR/FLK-1 receptor tyrosine kinase inhibitor identification assay, and use of compds. for treatment of vasculogenesis- and angiogenesis-related diseases)

IT Receptors
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(**vascular endothelial growth factor**; KDR/FLK-1 receptor tyrosine kinase inhibitor identification assay, and use of compds. for treatment of vasculogenesis- and angiogenesis-related diseases)

IT 127464-60-2, **Vascular endothelial growth factor**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BIOL (Biological study); PROC (Process)
(KDR/FLK-1 receptor tyrosine kinase inhibitor identification assay, and use of compds. for treatment of vasculogenesis- and angiogenesis-related diseases)

IT 3359-49-7, SU 4928 5812-07-7, SU 4312 **62540-08-3**, SU 5208 **91822-51-4**, SU 4314 186611-03-0, SU 4932 186611-55-2, SU 4313 197592-54-4, SU 0879 197592-55-5, SU 1076 197592-56-6, SU 1385 197592-57-7, SU 1387 197592-58-8, SU 1393 197592-59-9, SU 1433 197592-60-2, SU 1498 197592-61-3, SU 1835 197592-62-4, SU 4136 197592-63-5, SU 4157 197592-64-6, SU 4161 197592-65-7, SU 4209 197592-66-8, SU 4304 197592-67-9, SU 4328 197592-68-0, SU 4334 197592-69-1, SU 4348 197592-70-4, SU 4929 197592-71-5, SU 4936 197592-72-6, SU 4943 197592-73-7, SU 4945 197592-74-8, SU 5014 197592-75-9, SU 5015 **204005-46-9**, SU 5416
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(KDR/FLK-1 receptor tyrosine kinase inhibitor identification assay, and use of compds. for treatment of vasculogenesis- and angiogenesis-related diseases)

IT 141350-03-0, Flt-1 **VEGF** receptor tyrosine kinase 150977-45-0, Flk-1/KDR **VEGF** receptor tyrosine kinase
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(KDR/FLK-1 receptor tyrosine kinase inhibitor identification assay, and use of compds. for treatment of vasculogenesis- and angiogenesis-related diseases)

Congxin; Schlessinger, Joseph; Hubbard, Stevan R.; McMahon, Gerald; Tang, Peng C.

SOURCE: PCT Int. Appl., 493 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9807835	A2	19980226	WO 1997-US14885	19970821
WO 9807835	A3	19981001		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5942428	A	19990824	US 1996-701191	19960821
AU 9741603	A1	19980306	AU 1997-41603	19970821
EP 931152	A2	19990728	EP 1997-939534	19970821
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRIORITY APPLN. INFO.: US 1996-701191 19960821
US 1996-34168 19961219
WO 1997-US14885 19970821
OTHER SOURCE(S): MARPAT 128:164361

AB The present invention relates to the 3-dimensional structures of a protein tyrosine kinase optionally complexed with one or more compds. Thus, a 310-amino acid fragment fibroblast growth factor receptor 1 (residues 456-765, FGFR1) was recombinantly prepd. contg. the amino acid substitutions Cys488.fwdarw.Ala, Cys584.fwdarw.Ser, and Leu457.fwdarw.Val, and an addnl. 5 residues (Ser-Ala-Ala-Gly-Thr) at the N-terminus. X-ray crystallog. yielded the at. structural coordinates of cryst. FGFR1 and its complexes with adenylyl diphosphonate, 3-[(3-(2-carboxyethyl)-4-methylpyrrol-5-yl)methylene]-2-indolinone, or 3-[4-(4-formylpiperazine-1-yl)benzylidenyl]-2-indolinone. Two forms of cryst. FGFR1 were obtained: one form (designated C2-A form) with unit cell dimensions of a = 208.3, b = 57.2, c = 65.5.ANG. and .beta. = 107.2.degree., and another C2-B form with dimensions a = 211.6, b = 51.3, c = 66.1.ANG. and .beta. = 107.7.degree.. The overall structure of FGFR1 is bi-lobate. The N-terminal lobe of FGFR1 spans amino acid residues 456-567 and comprises a curled .beta.-sheet of five antiparallel strands and one .alpha.-helix. The C-terminal lobe spans amino acid residues 568-765 and comprises two .beta.-strands and seven .alpha.-helixes. The at. coordinates that define the structures of the protein tyrosine kinase and any of the compds. bound to it are pertinent to methods for detg. the 3-dimensional structures of protein tyrosine kinases with unknown structure and to methods that

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9948868	A2	19990930	WO 1999-US6468	19990326
WO 9948868	A3	20000224		

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9933635	A1	19991018	AU 1999-33635	19990326
EP 1066257	A2	20010110	EP 1999-915018	19990326

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

PRIORITY APPLN. INFO.:

US 1998-79713	P	19980326
US 1998-80422	P	19980402
US 1998-81792	P	19980415
US 1998-82056	P	19980416
US 1998-89397	P	19980615
US 1998-89521	P	19980616
US 1998-98783	P	19980901
WO 1999-US6468	W	19990326

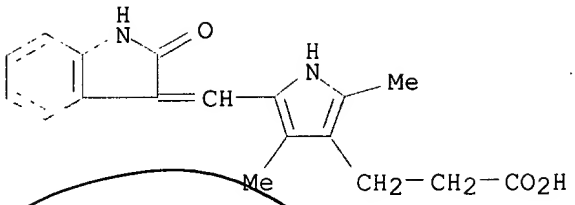
OTHER SOURCE(S): MARPAT 131:257441

AB The invention relates to certain indolinone-based and pyrazolylamide-based compds., I and II, their method of synthesis, and combinatorial libraries consisting of the compds. [wherein AB = atoms to make up 1-2 fused and/or connected rings; R = arom. or heteroarom. ring which may form an addnl. ring by cyclization to the methylene group; R1, R2 = H, alkyl, (hetero)aryl or -aliph. ring, amino, NO2, halo, etc.; R3 = (un)substituted Ph; Z = (un)substituted (CH2)0-3; R4, R5 = H, alkyl, (hetero)aryl or -aliph., amine, ketone, etc.]. The invention also relates to methods of modulating the function of protein kinases using these compds., and methods of treating diseases by modulating the function of protein kinases and related signal transduction pathways. Data for prepns. and/or biol. activity are given, as well as the prepns. of various oxindole intermediates. For instance, the pyrazolecarboxamide deriv. III gave up to 70% inhibition of growth of Calu-6 human lung carcinoma cells as a xenograft in mice. As another example, the indolinone deriv. IV was prepd. by condensation of 6-(4-methoxyphenyl)-2-oxindole with 3,5-dimethyl-1H-pyrrole-2-carboxaldehyde in the presence of piperidine. Extensive tests of a few selected compds. against a variety of protein kinases are described.

IC ICM C07D209-34
ICS C07D403-06; C07D409-06; A61K031-40; A61K031-415

CC 27-11 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 1

IT Blood vessel
(endothelium, inhibition of **proliferation**; prepn. of pyrazolecarboxylic acid amides and (arylmethylene)indolinones as



L11 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1998:147306 HCAPLUS
DOCUMENT NUMBER: 128:204803
TITLE: Indolinone combinatorial libraries and related products and methods for the treatment of disease
INVENTOR(S): Tang, Peng Cho; Sun, Li; McMahon, Gerald; Hirth, Klaus
Peter; Shawver, Laura Kay; et al.
PATENT ASSIGNEE(S): Sugen, Inc., USA; Tang, Peng Cho; Sun, Li; McMahon, Gerald
SOURCE: PCT Int. Appl., 293 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9807695	A1	19980226	WO 1997-US14736	19970820
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CN 1155838	A	19970730	CN 1996-190616	19960605
EP 929520	A1	19990721	EP 1997-939480	19970820
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
US 6147106	A	20001114	US 1997-915366	19970820
JP 2001503736	T2	20010321	JP 1998-510973	19970820
AU 9741556	A1	19980306	AU 1997-41556	19970821

PRIORITY APPLN. INFO.:		
US 1996-702232	A	19960823
US 1996-31585	P	19961205
US 1996-31586	P	19961205
US 1996-31588	P	19961205
US 1996-32546	P	19961205
US 1996-32547	P	19961205
US 1997-45565	P	19970505
US 1997-45566	P	19970505
US 1997-45714	P	19970505
US 1997-45715	P	19970505

NCBI PubMed National Library of Medicine NLM

Entrez PubMed

NEW

PubMed Services

Related Resources

☐**3001**: Li GH, Yang GJ. Related Articles

Inhibitory effect of antisense basic fibroblast growth factor oligonucleotides on proliferation of cultured aortic smooth muscle cells induced by angiotensin II in SHR rats.
Zhongguo Yao Li Xue Bao. 1998 Mar;19(2):132-5.
PMID: 10374635 [PubMed - indexed for MEDLINE]

☐**3002**: Zhang Y, Lu S, Wang J. Related Articles

[Fracture repair and cytokine regulation].
Zhonghua Wai Ke Za Zhi. 1997 May;35(5):316-8. Review. Chinese. No abstract available.
PMID: 10374575 [PubMed - indexed for MEDLINE]

☐**3003**: Yan H, Chen W, Cheng D. Related Articles

[Expression and distribution of bFGF in rat lung tissue of chronic hypoxic pulmonary hypertension].
Zhonghua Jie He He Hu Xi Za Zhi. 1997 Dec;20(6):344-6. Chinese.
PMID: 10374443 [PubMed - indexed for MEDLINE]

☐**3004**: Fu X, Cuevas P, Gimenez-Gallego G, Wang Y, Sheng Z. Related Articles

The effects of fibroblast growth factors on ischemic kidney, liver and gut injuries.
Chin Med J (Engl). 1998 May;111(5):398-403.
PMID: 10374346 [PubMed - indexed for MEDLINE]

☐**3005**: Ostendorf T, Floege J. Related Articles

[Aptamers: a novel approach to intervention studies and development of novel therapeutic approaches].
Med Klin. 1999 Apr 15;94(4):219-23. Review. German.
PMID: 10373758 [PubMed - indexed for MEDLINE]

☐**3006**: Ji QS, Chattopadhyay A, Vecchi M, Carpenter G. Related Articles

Physiological requirement for both SH2 domains for phospholipase C-gamma1 function and interaction with platelet-derived growth factor receptors.
Mol Cell Biol. 1999 Jul;19(7):4961-70.
PMID: 10373546 [PubMed - indexed for MEDLINE]

☐**3007**: Tasheva ES, Funderburgh ML, McReynolds J, Funderburgh JL, Conrad GW. Related Articles, Protein, Nucleotide

The bovine mimecan gene. Molecular cloning and characterization of two major

RNA transcripts generated by alternative use of two splice acceptor sites in the third exon.
J Biol Chem. 1999 Jun 25;274(26):18693-701.
PMID: 10373482 [PubMed - indexed for MEDLINE]

☐**3008**: Yonei-Tamura S, Endo T, Yajima H, Ohuchi H, Ide H, Tamura K. Related Articles
FGF7 and FGF10 directly induce the apical ectodermal ridge in chick embryos.
Dev Biol. 1999 Jul 1;211(1):133-43.
PMID: 10373311 [PubMed - indexed for MEDLINE]

☐**3009**: Jiang LI, Sternberg PW. Related Articles
Socket cells mediate spicule morphogenesis in Caenorhabditis elegans males.
Dev Biol. 1999 Jul 1;211(1):88-99.
PMID: 10373307 [PubMed - indexed for MEDLINE]

☐**3010**: Jung J, Zheng M, Goldfarb M, Zaret KS. Related Articles, OMIM
Initiation of mammalian liver development from endoderm by fibroblast growth factors.
Science. 1999 Jun 18;284(5422):1998-2003.
PMID: 10373120 [PubMed - indexed for MEDLINE]

☐**3011**: Rosenkranz S, Kazlauskas A. Related Articles
Evidence for distinct signaling properties and biological responses induced by the PDGF receptor alpha and beta subtypes.
Growth Factors. 1999;16(3):201-16. Review.
PMID: 10372961 [PubMed - indexed for MEDLINE]

☐**3012**: Miyakawa K, Ozawa K, Uruno T, Imamura T. Related Articles
The C-terminal region of fibroblast growth factor-1 is crucial for its biological activity and high level protein expression in mammalian cells.
Growth Factors. 1999;16(3):191-200.
PMID: 10372960 [PubMed - indexed for MEDLINE]

☐**3013**: Rege AA, Bjercke RJ, Erichsen D, Owens R, Stephan CC, Brock TA. Related Articles
Development of novel monoclonal antibodies for the analysis of functional sites in FGF-2.
Growth Factors. 1999;16(3):161-9.
PMID: 10372957 [PubMed - indexed for MEDLINE]

☐**3014**: Whitelock JM, Graham LD, Melrose J, Murdoch AD, Iozzo RV, Underwood PA. Related Articles
Human perlecan immunopurified from different endothelial cell sources has different adhesive properties for vascular cells.
Matrix Biol. 1999 Apr;18(2):163-78.
PMID: 10372557 [PubMed - indexed for MEDLINE]

☐**3015**: Gebhardt R, Weiser UK. Related Articles
[Minimal flow anesthesia in newborn infants--advantages and risks].
Anaesthesiol Reanim. 1999;24(2):41-6. German.
PMID: 10372434 [PubMed - indexed for MEDLINE]

☐**3016**: Okada-Ban M, Grassi M, Plouet J, Thiery JP, Jouanneau J. Related Articles

[Impact on tumor angiogenesis and tumor progression of expression of the 18 kd and 24 kd isoforms of FGF-2].
Pathol Biol (Paris). 1999 Apr;47(4):375-9. French.
PMID: 10372408 [PubMed - indexed for MEDLINE]

☐**3017**: Bikfalvi A. Related Articles

[Role of fibroblast growth factor-2 in tumor angiogenesis].
Pathol Biol (Paris). 1999 Apr;47(4):364-7. Review. French.
PMID: 10372406 [PubMed - indexed for MEDLINE]

☐**3018**: Gaillard I, Prugnard E, Brand C, Chambaz E, Vilgrain I. Related Articles

[Interactions between steroidogenic cells and capillary endothelial cells in the adrenal gland].
Pathol Biol (Paris). 1999 Apr;47(4):314-21. French.
PMID: 10372399 [PubMed - indexed for MEDLINE]

☐**3019**: Myllarniemi M, Frosen J, Calderon Ramirez LG, Buchdunger E, Lemstrom K, Hayry P. Related Articles

Selective tyrosine kinase inhibitor for the platelet-derived growth factor receptor in vitro inhibits smooth muscle cell proliferation after reinjury of arterial intima in vivo.
Cardiovasc Drugs Ther. 1999 Apr;13(2):159-68.
PMID: 10372232 [PubMed - indexed for MEDLINE]

☐**3020**: Meyrier A. Related Articles

[Vascular mechanisms of renal fibrosis. Vasculonephropathies and arterial hypertension].
Bull Acad Natl Med. 1999;183(1):33-45; discussion 45-6. Review. French.
PMID: 10371763 [PubMed - indexed for MEDLINE]

Display Summary Save Text Order Details Add to Clipboard
Show: 20 Items 3001-3020 of 17731 Page 151 of 887 Select page: << 151 152 153 154 155 156 157 158 159 160 >>

NCBI PubMed National Library of Medicine NLM

PubMed Nucleotide Protein Genome Structure PopSet Taxonomy OMIM

Search PubMed for ENDOTHELIAL CELLS CONTACTED WITH VEGF OR PDG Go Clear

Limits Preview/Index History Clipboard

Display Summary Save Text Order Details Add to Clipboard

Entrez PubMed

Items 4401-4420 of 17731 Page 221 of 887 Select page: << 221 222 223 224 225 226 227 228 229 230 >>

Show: 20

NEW

PubMed Services

Related Resources

4401: Schilling D, Reid IV JD, Hujer A, Morgan D, Demoll E, Bummer P, Fenstermaker RA, Kaetzel DM. Related Articles

Loop III region of platelet-derived growth factor (PDGF) B-chain mediates binding to PDGF receptors and heparin.
Biochem J. 1998 Aug 1;333 (Pt 3):637-44.
PMID: 9677323 [PubMed - indexed for MEDLINE]

4402: Bishop JE, Butt R, Dawes K, Laurent G. Related Articles

Mechanical load enhances the stimulatory effect of PDGF on pulmonary artery fibroblast procollagen synthesis.
Chest. 1998 Jul;114(1 Suppl):25S. No abstract available.
PMID: 9676609 [PubMed - indexed for MEDLINE]

4403: Tsou AP, Wu KM, Tsen TY, Chi CW, Chiu JH, Lui WY, Hu CP, Chang C, Chou CK, Tsai SF. Related Articles

Parallel hybridization analysis of multiple protein kinase genes: identification of gene expression patterns characteristic of human hepatocellular carcinoma.
Genomics. 1998 Jun 15;50(3):331-40.
PMID: 9676427 [PubMed - indexed for MEDLINE]

4404: Alvarez IS, Araujo M, Nieto MA. Related Articles

Neural induction in whole chick embryo cultures by FGF.
Dev Biol. 1998 Jul 1;199(1):42-54.
PMID: 9676191 [PubMed - indexed for MEDLINE]

4405: Cafagna D, Melon F, Balbi M, Ponte E. Related Articles

[Vascular manifestations in systemic sclerosis (scleroderma)].
Minerva Med. 1998 May;89(5):153-61. Review. Italian.
PMID: 9676180 [PubMed - indexed for MEDLINE]

4406: Singhal PC, Sagar S, Reddy K, Sharma P, Ranjan R, Franki N. Related Articles

HIV-1 gp120 envelope protein and morphine-tubular cell interaction products modulate kidney fibroblast proliferation.
J Investig Med. 1998 Jun;46(5):243-8.
PMID: 9676058 [PubMed - indexed for MEDLINE]

4407: Zamai M, Caiolfa VR, Pines D, Pines E, Parola AH. Related Articles

Nature of interaction between basic fibroblast growth factor and the

antiangiogenic drug 7,7-(Carbonyl-bis[imino-N-methyl-4, 2-pyrrolecarbonylimino[N-methyl-4,2-pyrrole]-carbonylimino])bis-(1, 3-naphthalene disulfonate).
Biophys J. 1998 Aug;75(2):672-82.
PMID: 9675169 [PubMed - indexed for MEDLINE]

☐ **4408**: Ogawa K, Wakayama A, Kunisada T, Orii H, Watanabe K, Agata K. Related Articles, Protein, Nucleotide
Identification of a receptor tyrosine kinase involved in germ cell differentiation in planarians.
Biochem Biophys Res Commun. 1998 Jul 9;248(1):204-9.
PMID: 9675112 [PubMed - indexed for MEDLINE]

☐ **4409**: Brady LM, Fox ES, Fimmel CJ. Related Articles
Polyenylphosphatidylcholine inhibits PDGF-induced proliferation in rat hepatic stellate cells.
Biochem Biophys Res Commun. 1998 Jul 9;248(1):174-9.
PMID: 9675106 [PubMed - indexed for MEDLINE]

☐ **4410**: Somjen D, Kohen F, Jaffe A, Amir-Zaltsman Y, Knoll E, Stern N. Related Articles
Effects of gonadal steroids and their antagonists on DNA synthesis in human vascular cells.
Hypertension. 1998 Jul;32(1):39-45.
PMID: 9674635 [PubMed - indexed for MEDLINE]

☐ **4411**: Bydlowski SP, Pares MM, Soares RP, Lopes AA. Related Articles
Stimulation of human smooth muscle cell proliferation by thrombin involves increased synthesis of platelet-derived growth factor.
Chest. 1998 Jul;114(1):236-40.
PMID: 9674475 [PubMed - indexed for MEDLINE]

☐ **4412**: Ohgoda O, Sakai A, Koga H, Kanai K, Miyazaki T, Niwano Y. Related Articles
Fibroblast-migration in a wound model of ascorbic acid-supplemented three-dimensional culture system: the effects of cytokines and malotilate, a new wound healing stimulant, on cell-migration.
J Dermatol Sci. 1998 Jun;17(2):123-31.
PMID: 9673894 [PubMed - indexed for MEDLINE]

☐ **4413**: Ridefelt P, Siegbahn A. Related Articles
Tyr1009 and Tyr1021 in the platelet-derived growth factor beta-receptor mediate agonist triggered calcium signalling.
Anticancer Res. 1998 May-Jun;18(3A):1819-25.
PMID: 9673410 [PubMed - indexed for MEDLINE]

☐ **4414**: Walters JD. Related Articles
Transmembrane signaling in periodontal mesenchymal cells: the linkage between stimulus and response.
Periodontol 2000. 1993 Oct;3:76-98. Review. No abstract available.
PMID: 9673159 [PubMed - indexed for MEDLINE]

☐ **4415**: Zellin G. Related Articles

Growth factors and bone regeneration. Implications of barrier membranes.
Swed Dent J Suppl. 1998;129:7-65.
PMID: 9672999 [PubMed - indexed for MEDLINE]

☐ **4416**: Peters JW, Bezstarosti-van Eeden J, Erdmann W, Meursing AE. Related Articles
Safety and efficacy of semi-closed circle ventilation in small infants.
Paediatr Anaesth. 1998;8(4):299-304.
PMID: 9672927 [PubMed - indexed for MEDLINE]

☐ **4417**: Herrlich A, Daub H, Knebel A, Herrlich P, Ullrich A, Schultz G, Gudermann T. Free in PMC, Related Articles
Ligand-independent activation of platelet-derived growth factor receptor is a necessary intermediate in lysophosphatidic, acid-stimulated mitogenic activity in L cells.
Proc Natl Acad Sci U S A. 1998 Jul 21;95(15):8985-90.
PMID: 9671791 [PubMed - indexed for MEDLINE]

☐ **4418**: Ben-Hur T, Rogister B, Murray K, Rougon G, Dubois-Dalcq M. Related Articles
Growth and fate of PSA-NCAM+ precursors of the postnatal brain.
J Neurosci. 1998 Aug 1;18(15):5777-88.
PMID: 9671666 [PubMed - indexed for MEDLINE]

☐ **4419**: Yang Y, Guillot P, Boyd Y, Lyon MF, McMahon AP. Related Articles
Evidence that preaxial polydactyly in the Doublefoot mutant is due to ectopic Indian Hedgehog signaling.
Development. 1998 Aug;125(16):3123-32.
PMID: 9671585 [PubMed - indexed for MEDLINE]

☐ **4420**: Lim CP, Jain N, Cao X. Related Articles
Stress-induced immediate-early gene, egr-1, involves activation of p38/JNK1.
Oncogene. 1998 Jun 4;16(22):2915-26.
PMID: 9671412 [PubMed - indexed for MEDLINE]

Display Summary Save Text Order Details Add to Clipboard
Show: 20 Items 4401-4420 of 17731 Page 221 of 887 Select page: << 221 222 223 224 225 226 227 228 229 230 >>